# TDS Recon Data Collection Steps Used in Performing Sideshots

\*Before starting the survey make sure the data collector is set up to be used with the proper total station

After turning TDS data collector on, open Survey Pro

Click on New

Name Job (ex. Albeck pond)

**Azimuth type** = North Azimuth

**Units for Distances** = <u>US Survey Feet</u>

**Units for Angles** = <u>Degrees</u>

Adjust for Earth Curvature unchecked

**Use Scale Factor** *unchecked* 

Click next

**Enter First Point:** (this is the point where instrument it set over top of)

**Point Name** = 1

**Northing** = 5000.0 usft

Easting = 5000.0 usft

**Elevation** = 100.0 usft or whichever elevation you want to use

**Description** = Hub Set

Note: Once you set this up the first time it will become the default

Click Finish

#### **Open Survey Box**

Click on Backsight setup

**Occupy Point =** *Choose point 1, or the point you named above* 

**HI** = measure distance from hub set to eyepiece on total station

**HR** = measure height of rod with prism on it

**BS Direction** = 0.00

**Click Circle** 

**Backsight circle** = 0.0000

**Click Send to Instrument** 

Close window...It will ask if you really want to close...Click Yes

# Click on Traverse/Sideshot

Foresight = Point 2

**Description** = whatever point 2 is, usually another Hub Set or TBM

**Height of Rod** = Measure height of rod with prism on it (program uses what you entered

in Backsight Setup)
Click on Side Shot

Click OK

Close Window

**Open Backsight Setup** 

Click on BS Direction and BS Point will come up

Click on box...Choose point from list

Pick point #2

**Click Solve** 

**Close Backsight Setup** 

Close window...It will ask if you really want to close...Click Yes

## Open Traverse/Sideshot

Begin taking other shots

Make sure when the height of rod changes you change it prior to taking the shot

If you need to complete a **turning point** follow these steps:

## **Open Traverse/Sideshot**

Click on Traverse

Take the Shot

Click on Traverse Now

Move instrument to the point you just shot, traverse point (this is the point you will now be occupying)

Level instrument and measure distance for HI

Adjust sight of instrument to your backsight (normally a HUB or TBM)

Click Backsight Setup

**Click on BS Point** 

Click on box...Choose point from list (use a HUB or TBM)

**Click Circle** 

Enter 0.0000

**Send to instrument** 

**Close Backsight Setup** 

Close window...It will ask if you really want to close...Click Yes

Continue Surveying